Hewlett Packard Enterprise

Seven tips for developing an effective unstructured data analytics program

Mastering Big Data is becoming increasingly complex with the explosion of unstructured data.

87%

of organizations with Big Data projects claimed analytics were unsuccessfully adopted in their organization.[1]

2.5 quintillion

bytes of data created per day from unstructured data sources like **sensors**, **social media posts**, and **digital photos**.[2]

31.7%

compound annual growth rate of IoT endpoints from 2013 through 2020, reaching an installed base of **20.8 billion units**.[3]

$430 billion

in productivity benefits by 2020 for companies that analyze relevant data and deliver actionable data.[4,5]

However, if harnessed effectively, unstructured data analytics can reap significant rewards: reduced costs, revenue growth, greater productivity and innovation, and a more competitive business.

Make unstructured data analytics work for you

1. Corral all stakeholders

Use a scoping workshop to bring stakeholders together. Create a unified view of standard information analysis practices, data capture, and use cases to form an in-depth roadmap.

2. Harness all your data without disruptions

Big Data can come from numerous data silos. Tap into all relevant data regardless of format—text, video, image and audio—to get a holistic picture. Consider technology that offers out-of-the-box access to data repositories inside and outside your firewall to eliminate copying requirements, storage costs, and hand-off risks.

Unstructured content accounts for 90% of all digital data, locked away across different data stores, in different locations, and in varying formats.[5]

3. Personalize knowledge discovery

Incorporate the analysis of deep neural network and machine learning. This allows you to achieve effective, contextually relevant knowledge discovery; unlock hidden insights; and reveal trends, patterns, interactions, and relationships. A viable system must be able to "learn" automatically from your information consumption history, and personalize information delivery proactively.

4. Adopt enterprise-grade security

Intellectual property, confidential documents, personnel data, and other sensitive information must be protected from unauthorized access. Security should be top of mind when you have a powerful knowledge discovery system. Look for proven enterprise-grade security that will preserve all security entitlements so the right people can access the right information.

5. Embrace advanced technologies

Make sure the technology addresses key search and unstructured data analytics requirements such as automatic hyperlinking and search based on concepts, keywords, field text, and phrases, among others. Automated analytics capabilities allow you to personalize and enhance your data. Support for third-party integrations is also a key capability.

> "The ability to leverage, say, sentiment analysis of social media data, will allow us to more effectively uncover and respond to suspicious behaviors and pertinent information in a much more efficient manner. It's truly impressive what can be done to capitalize on all this data."
>
> – **Russell Hammad**, CEO of Zenith Gulf Security Systems

6. Team with proven market leaders

Be sure your chosen data analytics solution can handle the wide range of data sources and types and has demonstrated its expertise in both products and services as well as verified success in many industries and business use cases.

7. Learn from others

Look to unstructured data analytics leaders in your industry and others for innovative business use cases. All organizations can solve critical business problems by analyzing unstructured data.

> "The system has helped us catch 2,739 people who were wanted for traffic and criminal offenses, both locally and internationally, since 2012."
>
> – **Colonel Al Mazroui**, Director of Dubai Traffic Police

How can HPE help?

HPE has been in the business of providing data solutions for over two decades. We have helped businesses and government agencies worldwide to use Big Data to improve operations, gain a competitive advantage, and find new revenue opportunities. Our solutions, to meet the complexities of unstructured data analysis, include HPE Intelligent Data Operating Layer (IDOL) and HPE Big Data Software Services. We continue to raise the bar when it comes to technology and innovation, and our experts can help you meet your Big Data requirements.

> "HPE IDOL has helped to automatically search for and extract key concepts from a massive amount of text, video, and audio data on a daily basis. This has significantly enhanced user experience and productivity, quality of information, and reduced operating costs."
>
> – **Zhou Qing**, research and development engineer, Xian Panorama Data Co., Ltd.

Learn more about HPE Big Data solutions

hpe.com/software/IDOL

hpe.com/services/bigdata

Download the TDWI "A Guide to Achieving Big Data Analytics Maturity" and the full white paper, both available at **hpe.com/software/bigdata**

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3. "Forecast Alert: Internet of Things – Endpoints and Associated Services, Worldwide, 2015," Gartner, 2015
4. "5 Predictions For Big Data Analysis And Cognitive Computing In 2016," by Gil Press, Forbes, December 15, 2015
5. "Solving the Unstructured Data Challenge," by Jaikumar Vijayan, CIO, June 25, 2015

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